

at any moment to become reduced to zero (paroxysm of paralytic apnoea) by slight inhibitory stimuli of peripheral origin; death eventually resulting, during or after a final paroxysm, from entire failure of the inspiratory forces."

Dr. J. J. Putnam, in the number of the same journal immediately succeeding those containing Dr. Curtis' paper, discusses the same subject, and disagrees with the former author in that he considers that diminished resistance power of the respiratory centre to inhibitory influences as of less weight, and increased inhibitory stimulus as of more weight in the production of the paroxysms. A great deal of influence is ascribed by him to emotional influence, and he considers that it is probable that the case steadily progresses to a fatal termination in the intervals between the paroxysms, and that the attacks only hasten, not cause the fatal result.

Dr. W. R. Gowers, *Brit. Med. and Surg. Journal*, Feb. 6, thinks that the paroxysm is due to increased stimulation of that part of the respiratory centre that has to do with extraordinary respiratory efforts, an over action of this centre on reflex excitation, the over action being of the nature of diminished resistance not to inhibitory, but to excitatory stimuli. He considers the order of the action of the hydrophobic poison is about as follows: first, on the medulla oblongata; second, on the cerebral hemispheres; third, on the spinal cord. The effect on the latter is rarely marked except in the later stages of the disorder; the effect on the hemispheres is shown in the delirium that is so noticeable in some cases; while the action on the medulla is prominent throughout.

TETANUS.—The following are the conclusions derived from an analysis of four hundred and fifteen cases of tetanus, by Dr. D. W. Yandell, *Brain*, No. III., Oct., 1878.

- I. That traumatic tetanus is most fatal during the first decade of life.
- II. That it usually supervenes between four and nine days after the injury.
- III. That the largest number of recoveries are found in cases in which the disease occurred after the lapse of nine days from the injury.
- IV. When tetanus continues fourteen days, recovery is the rule and death the exception, *apparently independent of the treatment.*
- V. Tetanus arising during the puerperal state is the most fatal form of the disease.
- VI. Chloroform has up to this time yielded the largest percentage of cures in acute tetanus.
- VII. The true test of a remedy for tetanus is its influence on the history of the disease: (a.) Does it cure cases in which the disease occurred prior to the ninth day after the injury? (b.) Does it fail in cases whose duration exceeds fourteen days?
- VIII. Tried by these tests, no agent has yet established its claim as a true remedy for tetanus.

NOCTURNAL EPILEPSY.—The following are the closing paragraphs of an interesting paper, by M. G. Echeverria, in the *Journal of Mental Science*,

Jan., in which is given a pretty full discussion and description of the forms of nocturnal epilepsy. The article is of interest both in a clinical and medico-legal point of view, but its character and length are such that we cannot well reproduce more than its general conclusions.

"Nocturnal epileptic fits are observed more frequently in females than in males; and appear almost always associated with diurnal vertigo, *petit mal* or *haut mal*, when not with epileptic insanity.

"The ætiology of nocturnal epilepsy is essentially encephalic, and it may be chiefly attributable to hereditary predisposition, traumatism of the head, alcoholism, syphilis, and strong emotional causes.

"The nocturnal incontinence of urine, the lacerations of the tongue, and the petechial eruption over the face and neck, are not constant phenomena, but, when existing, they possess an unquestionable pathognomonic value.

"The sudden explosion of frantic momentary bewilderment in the middle of the night, during sleep, or of insanity on arising in the morning, are proofs of nocturnal epilepsy. If nocturnal incontinence of urine, hereditary predisposition, with strange peculiarities of character, extreme propensity to anger and furious violence, are observed besides, these phenomena then prove, beyond all doubt, the existence of epilepsy.

"Most sleep-walkers and somnambulists are persons of neurotic temperament, exhibiting manifest signs of some neurosis, and ultimately arriving at unmistakable epilepsy or insanity.

"The attacks of somnambulism seldom, if ever, present the short duration, or the final outburst of violence characteristic of the nocturnal epileptic fits with talking and moving about of the patient. Nor do the former show the uniformity and constant sameness of the latter.

"Hallucinations chiefly of sight and hearing, of a most frightful, terrifying character, usually accompany and induce the wild excitement of the nocturnal fits.

"The nocturnal epileptic shows, as a rule, complete amnesia of his doings during the attack, but keeps more or less vivid recollections of his delusions, as of a dreadful nightmare.

"The nocturnal epileptic, acting like the somnambulist, in an unconscious automatic manner, cannot be held responsible for any misdeed perpetrated during his fits; he, however, must be regarded, in such cases, as one of the most dangerous lunatics, and restrained in a lunatic asylum.

"Nocturnal fits accompanied by paralysis, are free from immediate concomitant insanity.

"Finally, diligent and close inquiry into the phenomena of nocturnal epilepsy confirms the correctness of Trousseau's aphorism '*Tout ce qui est accident nocturne doit faire songer à l'épilepsie.*'"

INCONTINENCE OF URINE IN CHILDREN.—At the meeting of the Harveian Society of London, November 20th, 1878, Dr. Farquharson read a paper on incontinence of urine in children, of which the following abstract is given in the *British Med. Journal*, December 28th:

After some preliminary remarks on the bearings of incontinence of urine on surgery and obstetric medicine, he referred to the subject under three